

AKJDPG 4: Physics for everyone - Outreach activities for young researchers

Science dissemination plays a fundamental role in a scientist's life, and it is crucial for everyone involved in academia to raise awareness of the usefulness of science and fundamental scientific research in everyday life. In this session, after a short introduction on the role of outreach projects in a researchers career, we wish to give an overview on successful outreach projects in Europe and beyond, such as EPS Young Minds Project, DPG Physics for Refugees and Sunshine for Palestine. The second part of this session will be in the form of a workshop, where the participants will be divided in groups and assigned a case study to discuss, regarding the planning of an outreach activity for a specific audience.

Organised by: Roberta Caruso (EPS Young Minds), Ulrike Ritzmann (EPS Young Minds), Araceli Venegas-Gomez (EPS Young Minds)

Time: Wednesday 9:30–12:40

Location: E 124

AKJDPG 4.1 Wed 9:30 E 124

Importance of Outreach for Scientists — ●RÜDIGER VOSS — EPS President

In this talk, I will discuss the relevance of outreach and education activities for scientists at all career stages. It is important to raise awareness of the strong impact of scientific results on every-day life. Here, I will review outreach activities of the European Physical Society and discuss the benefits of outreach activities especially for early-stage researchers.

AKJDPG 4.2 Wed 9:55 E 124

EPS Young Minds Project — ●ROBERTA CARUSO — EPS Young Minds

Young Minds is an EPS project started in 2010 to encourage graduate and undergraduate students to get together to form self-organized groups called Sections, in order to carry on a number of activities ranging from outreach to professional development. In these seven years the project has seen a continuous growth, and nowadays it counts more than 40 sections all over Europe, organizing more and more ambitious activities.

AKJDPG 4.3 Wed 10:15 E 124

Physics for All - A project to carry physics into refugee sites — ●SARAH SCHULZ — DPG office

Physics for All is a project of the German Physical Society (DPG) and the Georg-August University Göttingen, funded by the German Federal Ministry of Education and Research (BMBF). The project is based on the idea that the phenomena of nature are universal. Playing with nature, doing physical experiments is a deep human need, which does not require any language skills and is independent of any national, religious, age or gender boundaries. By performing simple experiments we bring physics to children and young people in refugee sites nationwide in a playful way. With the help of many volunteers we are able to put the project into practice at more than 75 sites and schools nationwide. All experimental equipment is centrally organized and sent to our voluntary helpers on site. Link to the project: <https://www.dpg-physik.de/pff>

AKJDPG 4.4 Wed 10:35 E 124

The Science4People Project, Scientific Dissemination in Palestine — ●BARBARA CAPONE — Department of Science, Università di Roma Tre, Italy

The Science4People project aims at empowering a group of young women in science in Palestine, who already set up an alternative education program in local schools. A team of young female students from Bethlehem University, supported by the group of scientists of Sunshine4Palestine, an NGO founded by physicists and engineers, set up a series of simple experiments that can be performed with everyday life material, on the themes of energy and water.

Kids living in critical conditions, often without access to electricity and water, are involved in the scientific dissemination project by being exposed to science through a ludic approach, thus learning how to manufacture a small battery with scrap material, how to build their own little lamp, but especially how science can be a path to undertake and solve everyday problems.

Starting from March 2017, the group of girls started its path going in different local public and private schools in Bethlehem from the most diversified social background, involving over 400 students aged 6 to 18.

As a joined effort between the European Physical Society, Sunshine4Palestine and ICTP the beginning of April will see 4 amongst the Science4People girls travel to the International Center for Theoretical Physics in Trieste where they will get a full FABLAB training by learning how to how to mount, use and program 3D printer that will then be installed at the University of Bethlehem .

15 min. break

AKJDPG 4.5 Wed 11:10 E 124

Workshop: How to organize an outreach event? — ●ULRIKE RITZMANN, ROBERTA CARUSO, and ARACELI VENEGAS-GOMEZ — EPS Young Minds

How can you present your research field to high school students and encourage them to study physics? Which experiments can you perform in kindergarten to share your fascination of physics with them? In this workshop, we want to discuss in small groups different practical aspects of organising outreach events.